

DRAFT Summary of replication analysis of Packages 1,2 and 3

Criteria: An MPA was considered to possess a particular habitat if it had more than 0.5 sq mi (or 0.5 linear mi) of that habitat. The major exception was for kelp beds. An MPA with any persistent kelp bed, no matter how small, was considered to have that habitat type.

MPAs were divided into two types with high levels of protection (State Marine Reserves and High level SMCA's).

Analysis

Figure R1 shows that all three packages have a very similar number of MPAs of high protection value across habitat types. No package protected eelgrass beds. Minimum replicates of 3 MPAs in all other habitat types were met for all packages for all habitat types except:

- 1) Package 3 has only 2 protected tidal flats
- 2) Package 1 has no protected 100-200 m soft sediments
- 3) Package 3 has only 2 protected 100-200 m soft sediment habitats
- 4) Package 1 has only 1 protected 30-100 m hard bottom habitat
- 5) All packages lack sufficient deep water hard bottom habitat (however, note the rarity of this habitat type mentioned in the SAT Evaluation sub-team review)/

Even these minor departures from network planning criteria disappear if all MPAs are considered, not just the ones with high levels of protection. Overall, the packages met replication criteria about equally well. They all protect shallow water habitats with a similar number of MPAs, but are much less protective of deep rocky or soft bottom habitats. It should be noted that some MPAs have very small amounts of some habitats (ca. 0.5 sq. mi) but were counted in totals as being equal to MPAs with much larger areas of protected habitat. Also, some MPAs are listed as not having a particular habitat type but might be found – with higher resolution data sets - to contain it. Significant differences among plans will more likely be found in the areas of habitat protected, and in the localities protected, rather than in number of protective MPAs defined in the fashion allowed by current habitat data.

